

Claims

I claim:

1. A method for estimating a movement speed of a mobile unit in a mobile radio communication system, comprising:
receiving a first signal corresponding to a signal transmitted from said mobile unit;
obtaining a second signal by calculating an envelope of said first signal;
obtaining a third signal by multiplying said second signal by a carrier, said carrier including a carrier frequency;
calculating a correlation coefficient of said third signal;
obtaining a Doppler frequency of said correlation coefficient referring to a corresponding relationship between said correlation coefficient and said Doppler frequency; and
estimating said movement speed of said mobile unit according to said Doppler frequency.
2. The method of claim 1, wherein said carrier frequency is between 8 to 60 Hz.
3. The method of claim 1, wherein calculating said envelope of said first signal further comprising squaring said envelope.
4. The method of claim 1, wherein referring to a corresponding relationship between said correlation coefficients and Doppler frequencies is referring to a table of correlation coefficients and Doppler frequencies.

5. A system for estimating a movement speed of a mobile unit, comprising:
a receiving unit for receiving a first signal corresponding to a signal transmitted from
said mobile unit;
a calculating unit for calculating an envelope of said first signal to obtaining a second
signal;
a modulating unit for multiplying said second signal by a carrier to obtain a third
signal, said carrier including a carrier frequency; and
an estimating unit for estimating said movement speed of said mobile unit according
to said third signal.
6. The system of claim 5, wherein said carrier frequency is between 8 to 60 Hz.
7. The system of claim 5, wherein said calculating unit further squaring said envelope.
8. The system of claim 5, wherein the estimating unit for estimating said movement
speed of said mobile unit according to said third signal comprises the following
steps:
calculating a correlation coefficient of said third signal;
obtaining a Doppler frequency of said correlation coefficient by referring to a
corresponding relationship between said correlation coefficient and said
Doppler frequency; and
estimating said movement speed of said mobile unit according to said Doppler
frequency.

9. The system of claim 8, wherein referring to a corresponding relationship between said correlation coefficient and said Doppler frequency is referring to a table of correlation coefficients and Doppler frequencies.